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A PROPOSAL FOR NEW COVERAGE OF INTERNATIONAL TRADE FLOWS

There are substantial changes in the way international trade flows perform. These changes force us to change our way of looking at and analyzing them. The paper therefore calls attention to these changes and the resulting need for new coverage of international trade flows giving the proposal for it. The paper introduces a new coverage of international trade flows including the existing registered trade flows and also new trade flows in the contemporary world trade and the possible way and direction in determining the value of foreign trade of individual countries and also the world trade.

Keywords: proposal, new coverage, international trade flows, transnational companies.

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НОВЕ ФОРМУВАННЯ МІЖНАРОДНИХ ТОРГІВЕЛЬНИХ ПОТОКІВ

У статті показано істотні зміни в міжнародних торговельних потоках за останні роки. Ці зміни примушують змінити оцінки і аналіз міжнародних торговельних потоків. Описані ці зміни і виникаюча потреба в новому формуванні міжнародних торговельних потоків, представлено нові міжнародні торговельні потоки, у тому числі ті, що існують офіційно, а також нові торговельні потоки в сучасній світовій торгівлі і можливі шляхи і напрями у визначенні вартості зовнішньої торгівлі окремих країн, а також світової торгівлі.

Ключові слова: пропозиція, нове формулювання, міжнародні торговельні потоки, транснаціональні компанії.

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НОВОЕ ФОРМИРОВАНИЕ МЕЖДУНАРОДНЫХ ТОРГОВЫХ ПОТОКОВ

В статье показаны существенные изменения в международных торговых потоках за последние годы. Эти изменения заставляют изменить оценки и анализ международных торговых потоков. Описаны эти изменения и возникающая потребность в новой формулировке международных торговых потоков, представлены новые международные торговые потоки, в том числе существующие официально, а также новые торговые потоки в современной мировой торговле и возможные пути и направления в определении ценности внешней торговли отдельных стран, а также мировой торговли.

Ключевые слова: предложение, новая формулировка, международные торговые потоки, транснациональные компании.

Introduction. In times of growing activities of transnational companies and rising foreign direct investments, the patterns of trade have changed. The international system of production that takes place in foreign affiliates of transnational companies (TNCs) has geared the important link between transnational companies and trade and brought the changes in the way the international trade flows perform. The relationship between international trade and transnational companies has become so

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interwoven that their inter-relation inevitably imposes the following question: are transnational companies, i.e. the systems of their affiliates' networks worldwide, a substitute for international trade or do they complement it, by adding new ways and forms of cooperation [6, p. 96]? This link between transnational companies and trade flows must have our growing attention in the challenge posed by the international trade analysis in the contemporary world economy.

The second half of the twentieth century is characterized by the expansion of transnational companies which has become particularly accelerated since the 1990s. The liberalization of trade and investment, the deregulation and especially the break-up of eastern block of former socialist countries and their transition from centrally-planned to market economies after the 1990s created conditions for transnational companies to expand their operations without restraint. Nowadays there are more than 103,000 TNCs (parent companies) with more than 890.000 foreign affiliates worldwide [8]. These companies generate value added of almost 16 trln USD accounting for more than a 1/4 of global GDP, while only their foreign affiliates accounted for more than 1/10 of the world GDP and 1/3 of the world exports [11, p. 25].

The process of intensive expansion of transnational companies caused changes both in the pace of growth of international trade and also in the structure and forms of international trade. These changes have led to new ways of selling goods and services at international markets and to new forms of international trade flows. The paper therefore calls attention to the changes in the international trade flows performing and the resulting need for new coverage of international trade flows giving the proposal for it.

Changes in the way the international trade flows perform. The core of transnational companies' activities is undertaking direct investments abroad and establishing foreign affiliates for performing production in them (international production) with the aim to sell the manufactured goods and services at local market and markets of other countries. Up to the 1990s the sales of foreign affiliates and the world export were almost equal. But after the 1990s the sales of foreign affiliates accomplished faster growth and much higher value than the world export.

The period after the 1990s is the period when the significant changes happened in the way the international trade flows perform, caused by transnational companies' operations. The sales of foreign affiliates of transnational companies increased worldwide from 2.7 trln USD in 1982 to 6.1 trln USD in 1990 and then to 32.9 trln USD in 2010 (Table 3). At the same time, these sales of foreign affiliates were much higher than the world exports, showing that companies sold more through foreign affiliates than through traditional direct cross-border export registered by official international trade statistics as world export. The rise of foreign affiliates' sales was associated with the rise of foreign direct investments (FDIs). In 2010, when foreign direct investment flows exceeded 1.2 trln USD, the sales of foreign affiliates increased to over 32 trln USD while total world exports were 18.7 trln USD falling to just 56.7% of these sales (Table 3).

Thus the expansion of transnational companies, foreign affiliates and their sales led to the important trend in the world trade after the 1990s - to the new form of trade flows performed through foreign affiliates which has become more important than the

existing, traditional cross-border trade registered and publicly published in official trade statistics figures.

Table 3. Selected indicators of FDIs, foreign affiliates and the world exports

Item	Value at current prices (bln of dollars)		
	1982	1990	2010
FDI inflows	58	207	1 244
Sales of foreign affiliates	2 741	6 126	32 960
World exports of goods and services	2 395	4 417	18 713
World exports of goods and services as % of sales by foreign affiliates	87.3	72.1	56.7

Source: Author's calculation of the shares of the world export in foreign affiliates' sales based on: [10, p. 10 and 11, p. 24].

The outstanding sales of foreign affiliates after the 1990s that are not covered and not included in our analysis of international trade flows show that the existing, traditional coverage and analysis of international trade are inadequate and incomplete [4].

The existing coverage of international trade flows is based only on traditional trade forms for which the data are given by the official trade statistics figures and it is not in line with the contemporary changes in forms and ways of trading goods and services at international markets. Therefore, the existing coverage of trade flows and analysis based on it is not adequate. Consequently, there is a need for new coverage of international trade flows which includes existing registered trade flows and also new trade flows prevailing in the contemporary world economy.

A proposal for the new coverage of international trade flows. The significant mutual intertwining of transnational company's operations and trade flows, which has led to the emergence of new forms of trade flows, makes our coverage and analysis of trade flows more difficult, because trade does not occur only through traditional trade flows taking place across national borders but also through new forms. However, only the classic cross-border trade flows are covered by official international trade statistics figures published by international organizations and official national authorities of individual countries. Based on these data, we analyze the world trade and the foreign trade of individual countries.

The existing statistical coverage of international trade flows is based on the UN methodology of international trade statistics featured in "UN's International Merchandise Trade Statistics: Concepts and Definitions, Revision 2" (IMTS Rev. 2) which gives recommendations that countries should implement in their foreign trade statistics. Existing classic coverage of international merchandise trade statistics includes only classic trade transactions being performed across national borders and recorded in national balance of payments accounts. This means that the existing coverage of international trade comprises only traditional cross-border forms of trade. Also, this means that trade flows performed through the affiliates established through operations of transnational companies are not encompassed in the existing classic trade statistics and coverage although they predominate. The coverage of international trade lacks one important trade flow — trade through foreign affiliates. Apropos of that, our insight in trade flows based on existing coverage is not complete and it is not

in line with contemporary changes in the forms and ways of international trading. Therefore, new trade flows — trade flows through foreign affiliates — have to be recorded and included in the existing official international trade statistics figures.

Also, there are misleading facts in the existing coverage of foreign trade of individual countries. Official foreign trade statistics of individual countries include only traditional cross-border trade and does not include the indirect trade of their companies that happens through their foreign affiliates. In fact, these flows are included, but by a host country of an affiliate and not by a home country of a parent company where they should be registered. The cause for this is the fact that an affiliate, established by a transnational company in another country (host country), operates under the law of a host country and it is registered as a local company. Consequently, affiliate's foreign trade (exports and imports) is registered in a host country's foreign trade statistics as foreign trade (exports and imports) and is not registered in a home country's foreign trade statistics.

From company's aspect, however, there are no changes because company continues to sell its products at international markets but only through the other channel - the sales of its affiliates and these sales are registered in the company's books. But from the aspect of a home country of a company, there are big changes because these sales are realized through foreign affiliates and are not registered as the country's foreign trade. These sales include domestic sales of an affiliate at a host country's markets (domestic sales) and exports of the affiliate to third country's markets (these exports are registered but as host country's exports). So the important thing is to attribute the foreign affiliate's sales to a home country of an affiliate's parent company. This means that these sales should be deducted from a host country's trade figures. Therefore, the existing coverage of foreign trade of individual countries is also inadequate and incomplete.

Having in mind the deficiencies of the existing coverage of international trade flows and the need for comprehensive coverage of them from the aspect of both home countries and host countries, with the aim of insight and analysis of both international trade and foreign trade of individual countries, the following coverage of trade flows at the level of individual countries trade can be proposed:

Table 2. A proposal for new coverage of international trade flows

sales of a specified country abroad (registered export in official foreign trade statistics):
- export of foreign affiliates from a specified country to third countries' markets
- domestic sales of foreign affiliates at the specified country's market
+ domestic sales of foreign affiliates of a specified country's parent enterprises at a host country's markets
+ export of foreign affiliates of a specified country's parent enterprises from host countries to the third countries' markets
= new value of export

Source: adjusted from [5, p. 260].

As the exports of foreign affiliates (FA) to the third markets and domestic sales of foreign affiliate together form the total sales of foreign affiliates, the former proposal may be written as:

export of a country (registered in official foreign trade statistics)
- total sales of the foreign affiliates located at the country's market
+ total sales of foreign affiliates of the country's parent enterprises at foreign markets
= new value of export

or simplifying:

Export of the country:
- FA sales in the country
+ FA sales at other countries' markets
= New value of export

where "FA sales" means:

in the first case, when they are deducted — sales of affiliates of foreign companies located at the specified country's market;

in the second case, when they are added — sales of affiliates of domestic companies of the specified country abroad.

This method of calculating exports of a country and its foreign trade, contained in the proposal, enables us to attribute the sales of foreign affiliates (their domestic sales and export) to their home countries where their parent companies are located (foreign direct investors) which conduct and control production and sales of their foreign affiliates. This approach is in line with new and evolving statistics called FATS (foreign affiliate trade statistics) and the fact that sales of affiliates should be attributed to the home country of the parent company that is the ultimate investor, because it is the source of foreign direct investment and the investor that controls and conducts the sales through its affiliates.

If we adopted this proposal and adjusted it in order to calculate the world trade, we would get the next, new value of the world trade:

Table 3. Calculation of the world trade based on the new coverage of trade flows, 2010 (bln USD)

1	World export (registered in official international trade statistics)	18 546	} Domestic sales of foreign affiliates 26 271
2	+ Total sales of foreign affiliates	+ 32 960	
3	- Export of foreign affiliates	- 6 239	
4	Total world export that covers FA trade	45 267	

Source: Author's calculation based on the data from [13, p. 22 and p. 144; 11, p. 24].

As export of foreign affiliates is done by foreign affiliates from their host countries, this export is officially registered by the national foreign trade statistics as the export of host countries and thus it has already been included in the registered world export. That's why, in this calculation, it has been deducted from the value of the world export. This means that, in the end, the value of the world export is increased by the value of domestic sales of foreign affiliates in order to get the real value of total world export that includes both existing, classic trade flows and the new trade flows in the world economy covering foreign affiliate trade.

One can notice a significant difference between the existing, officially available value of the world trade published in official international trade figures and this new value of the world trade obtained from the calculation and coverage of new, dominant trade flows in the world trade. It has been observed that the new value of the world trade is much higher than the official value of the world trade. In 2010 it was 2.44 times higher than the official value of the world trade (Table 3), while in 2008 it was

2.18 times higher, in 1990 2.10 times higher and in 1982 1.79 times higher [3, p. 21]. This trend is in line with the growing importance of trade through foreign affiliates. The fact that this new value of the world trade is higher than the official value is also in line with the inclusion of the new flow in international trade - trade flow performed through foreign affiliates in the calculation, besides the classical cross-border trade flows. What makes the inclusion of new flows in the calculations further justified is the fact that this new trade flow became a primary flow in the 1990s.

It can also be noted that the domestic sales of foreign affiliates were 26.271 bln USD in 2010 (Table 3), which was higher than their value of 23.647 bln USD in 2008 and much more than 4.528 billion USD in 1990 and 1.895 bln USD in 1982 [3, p. 21]. This trend also indicates the importance and rise of domestic sales of foreign affiliates, which were more than 13.8 times higher in 2010 than 30 years before. It also shows that firms increased their sales at international markets much more through their domestic sales at host country's markets and less through traditional cross-border exportation that increased 7.7 times in the same period 1982-2010. It is noticeable that companies sell more through their affiliate's sales at host country's markets, that is domestic sales of foreign affiliates, and that this kind of sales grows faster than traditional exporting which makes it the primary channel of selling at international markets.

Conclusion. The paper shows the substantial changes in the way the international trade flows perform. The main drives of these changes are activities of transnational companies that result in higher trading through sales of foreign affiliates than through cross-border trading. The second kind of trading, cross-border trading, is covered by the existing classic official trade statistics, while the first, trading through foreign affiliates, is not covered although it has been the dominant channel of trading since the 1990s.

Therefore, the paper has given the proposal for new coverage of international trade flows, taking into account the basic principle of attributing the trade flows to the countries of the companies that are the controllers of these trade flows. Also, the paper showed the possible way of calculating the world trade including the new coverage of trade flows, i.e. including both the traditional and new trade flows.

The new coverage and the new calculation of international trade flows in the paper has shown the significant difference between the existing, officially available value of the world trade published in official international trade figures and this new calculated value of the world trade. This new, "real" value of the world trade is much higher than the existing one, known to us, which is in line with completing the calculation with new trade flows that are much higher and have faster growth than the traditional trade flows.

This proposal also opens the door for other researches and improvements in this field. It deserves some attention because it indicates the need for a different, new coverage of international trade flows and gives a suggestion on how to do that, but it also brings challenges for further suggestions and improvements in this area.

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Стаття надійшла до редакції 30.08.2012.